

ABSTRACT OF THE DISCLOSURE

Processes for separating supercritical or near-critical mixtures containing hydrogen, a solvent gas, methanol and a fatty alcohol under an initial pressure of from 100 to 300 bar are described, wherein the processes comprise: (a) reducing the pressure of such a mixture in a first stage to a pressure of from 50 to 150 bar to form a first recycle gas and a first partially-separated intermediate mixture, wherein the reduced pressure in the first stage is at least below the initial pressure; (b) reducing the pressure of the first partially-separated intermediate mixture in a second stage to a pressure of from 10 to 50 bar to form a second recycle gas and a second partially-separated intermediate mixture; and (c) reducing the pressure of the second partially-separated intermediate mixture in a third stage to a pressure of from 1 to 10 bar to form a third recycle gas and a fatty alcohol product.